

**NEW SOURCE CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR QUALITY**

**Indiana Automotive Fasteners  
1300 West Anderson Boulevard  
Greenfield, Indiana 46140**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 059-12739-00024	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary facility manufacturing nuts and bolts for the automotive industry.

Authorized Individual:	Gary Berling
Source Address:	1300 West Anderson Boulevard, Greenfield, Indiana, 46140
Mailing Address:	1300 West Anderson Boulevard, Greenfield, Indiana, 46140
SIC Code:	3452
County Location:	Hancock
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD or Emission Offset Rules;

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Three (3) electric annealing ovens, identified as EU-1a, EU-1b, and EU-1c, constructed in 1996, and exhausting to stacks V1a and V1b;
- (b) One (1) electric blueing oven, identified as EU-2, constructed in 1996, and exhausting to stacks V1c and V1d;
- (c) Two (2) electric tempering ovens, identified as EU-3a and EU-3b, constructed in 1996, and exhausting to stacks V3a and V3b respectively;
- (d) Two (2) electric quench oil ovens, identified as EU-4a and EU-4b, constructed in 1996, and exhausting to stacks V4a and V4b respectively;
- (e) One (1) oil quench dip bath, identified as EU-4, constructed in 1996, quenching a maximum of 360,000 fasteners per hour, and exhausting to stacks V5 and V5a;
- (f) Twenty-seven (27) head forming machines, identified as EU-6, constructed in 1996, each processing a maximum of 12,000 fasteners per hour, each controlled by a Smog Hog Electrostatic Precipitator, and all exhausting through ten (10) stacks (V6:3-7, 10-13, 15);
- (g) Two (2) SBL shot blasters, identified as EU-8a and EU-8b, constructed in 1996, each using a maximum of 773 pounds per hour of steel shot, controlled by one (1) baghouse, and

exhausting to stack V8;

- (h) Two (2) natural gas fired dacrotizing ovens, identified as EU-9, and EU-9-1, constructed in 1996, each rated at 1.0 MMBtu/hr, and exhausting to stacks V9 and V9-1 respectively;
- (i) One (1) electric zinc plating oven, identified as EU-10, constructed in 1996, and exhausting to stack V10;
- (j) One (1) zinc plating/chromate treatment dip process, identified as EU-12, constructed in 1996, coating a maximum of 162,000 fasteners per hour, with packed fume scrubbers for control, and exhausting to stack v12;
- (k) One (1) natural gas fired container wash oven, identified as EU-13, constructed in 1996, rated at 1.0 MMBtu/hr, and exhausting to stack V13;
- (l) One (1) secondary metal treatment dip process with an electric oven, identified as EU-14, constructed in 1996, coating a maximum of 152,000 fasteners per hour, and exhausting to stacks V14 and V14-1;
- (m) Two (2) natural gas fired boilers, identified as EU-15, and EU-15-1, constructed in 1996, each rated at 2.1 MMBtu/hr, and exhausting to stacks V15 and V15-1;
- (n) One (1) natural gas fired boiler, identified as EU-16, rated at 1.2 MMBtu/hr, constructed in 1996, and exhausting to stack V16;
- (o) One (1) dacrotizing metal treatment process, identified as EU-17, constructed in 1996, coating a maximum of 152,000 fasteners per hour;
- (p) One (1) 7,000 gallon hydrochloric acid (HCL) storage tank, identified as EU-18, constructed in 1996, controlled by a scrubber, and exhausting to stack V18; and
- (q) One (1) Plating treatment dip tank, identified as EU-19, constructed in 1996, coating a maximum of 162,000 fasteners per hour, and venting to stack V19.
- (r) Two (2) shot blasting units, identified as EU-20a, and EU-20b, each using a maximum of 775 pounds per hour of steel shot, controlled by one (1) baghouse, and exhausting to stack V20;
- (s) One (1) caustic wash and electric dry-off oven, identified as EU-21, and exhausting to stacks V21-A and V21-B;
- (t) One (1) dip coating operation and electric dry-off oven, identified as EU-22, and exhausting to stacks V22-A and V22-B;
- (u) One (1) top coating operation and electric dry-off oven, identified as EU-23, and exhausting to stacks V23-A and V23-B;
- (v) One (1) natural gas CO<sub>2</sub> generator, identified as EU-24, and rated at 0.078 MMBtu/hr, and exhausting to stack V24; and

- (w) One (1) electric tempering oven with a natural gas flame curtain and oil quench tank, identified as EU-25, rated at 0.01 MMBtu/hr, and exhausting to stack V25-B.

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1      Permit No Defense [IC 13]**

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This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Modification to Permit [326 IAC 2]**

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Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **B.6      Minor Source Operating Permit [326 IAC 2-6.1]**

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This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a)      The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
  - (1)      If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (2)      If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

#### B.7 Phase Construction Time Frame

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM may revoke this permit to construct if the:

- (a) Construction of the shot blasters and the Dacromet Coating Line has not begun within eighteen (18) months from the effective date of this permit or if during the construction of the shot blasters and the Dacromet Coating Line, work is suspended for a continuous period of one (1) year or more.

The OAQ may extend such time upon satisfactory showing that an extension, formally requested by the Permittee is justified.



## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.
- (c) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

### C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.6 Permit Revocation [326 IAC 2-1-9]**

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Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.7 Opacity [326 IAC 5-1]**

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Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.9 Stack Height [326 IAC 1-7]**

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The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

## Testing Requirements

### C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

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- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## Compliance Monitoring Requirements

### C.11 Compliance Monitoring [326 IAC 2-1.1-11]

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

### C.12 Monitoring Methods [326 IAC 3]

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

### C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.

- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

## **Record Keeping and Reporting Requirements**

### **C.14 Malfunctions Report [326 IAC 1-6-2]**

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

### **C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is

documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate

who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

**C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (b) Unless otherwise specified in this permit, any **(quarterly or semi-annual)** report shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does **(do)** not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (d) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

**C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

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- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.



- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description

- (a) Three (3) electric annealing ovens, identified as EU-1a, EU-1b, and EU-1c, constructed in 1996, and exhausting to stacks V1a and V1b;
- (b) One (1) electric blueing oven, identified as EU-2, constructed in 1996, and exhausting to stacks V1c and V1d;
- (c) Two (2) electric tempering ovens, identified as EU-3a and EU-3b, constructed in 1996, and exhausting to stacks V3a and V3b respectively;
- (d) Two (2) electric quench oil ovens, identified as EU-4a and EU-4b, constructed in 1996, and exhausting to stacks V4a and V4b respectively;
- (e) One (1) oil quench dip bath, identified as EU-4, constructed in 1996, quenching a maximum of 360,000 fasteners per hour, and exhausting to stacks V5 and V5a;
- (f) Twenty-seven (27) head forming machines, identified as EU-6, constructed in 1996, each processing a maximum of 12,000 fasteners per hour, each controlled by a Smog Hog Electrostatic Precipitator, and all exhausting through ten (10) stacks (V6:3-7, 10-13, 15);
- (g) Two (2) SBL shot blasters, identified as EU-8a and EU-8b, constructed in 1996, each using a maximum of 773 pounds per hour of steel shot, controlled by one (1) baghouse, and exhausting to stack V8;
- (h) Two (2) natural gas fired dacrotizing ovens, identified as EU-9, and EU-9-1, constructed in 1996, each rated at 1.0 MMBtu/hr, and exhausting to stacks V9 and V9-1 respectively;
- (i) One (1) electric zinc plating oven, identified as EU-10, constructed in 1996, and exhausting to stack V10;
- (j) One (1) zinc plating/chromate treatment dip process, identified as EU-12, constructed in 1996, coating a maximum of 162,000 fasteners per hour, with packed fume scrubbers for control, and exhausting to stack v12;
- (k) One (1) natural gas fired container wash oven, identified as EU-13, constructed in 1996, rated at 1.0 MMBtu/hr, and exhausting to stack V13;
- (l) One (1) secondary metal treatment dip process with an electric oven, identified as EU-14, constructed in 1996, coating a maximum of 152,000 fasteners per hour, and exhausting to stacks V14 and V14-1;
- (m) Two (2) natural gas fired boilers, identified as EU-15, and EU-15-1, constructed in 1996, each rated at 2.1 MMBtu/hr, and exhausting to stacks V15 and V15-1;
- (n) One (1) natural gas fired boiler, identified as EU-16, rated at 1.2 MMBtu/hr, constructed in 1996, and exhausting to stack V16;
- (o) One (1) dacrotizing metal treatment process, identified as EU-17, constructed in 1996, coating a maximum of 152,000 fasteners per hour;
- (p) One (1) 7,000 gallon hydrochloric acid (HCL) storage tank, identified as EU-18, constructed in 1996, controlled by a scrubber, and exhausting to stack V18; and
- (q) One (1) Plating treatment dip tank, identified as EU-19, constructed in 1996, coating a maximum of 162,000 fasteners per hour, and venting to stack V19.
- (r) Two (2) shot blasting units, identified as EU-20a, and EU-20b, each using a maximum of 775 pounds per hour of steel shot, controlled by one (1) baghouse, and exhausting to stack V20;
- (s) One (1) caustic wash and electric dry-off oven, identified as EU-21, and exhausting to stacks V21-A and V21-B;
- (t) One (1) dip coating operation and electric dry-off oven, identified as EU-22, and exhausting to stacks V22-A and V22-B;
- (u) One (1) top coating operation and electric dry-off oven, identified as EU-23, and exhausting to stacks V23-A and V23-B;

## Emission Limitations and Standards

### D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

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Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions for the two (2) natural gas fired boilers (EU-15, EU-15-1), and the one (1) natural gas fired boiler (EU-16) used for indirect heating purposes which were constructed after September 21, 1983 and for which the total source maximum operating capacity is less than or equal to 10 MMBtu/hr, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units of heat input. This value was based on the lesser of the following equation and 0.6 pounds per MMBtu:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = pounds of particulate matter emitted per million Btu heat input  
Q = total source maximum operating capacity rating in MMBtu per hour heat input

### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

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Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the abrasive blasting operation (EU-8a, EU-8b) shall not exceed 3.45 pounds per hour when operating at a rate of 0.773 tons per hour. The allowable PM emission rate from the headforming machines (EU-6) shall not exceed 4.13 pounds per hour when operating at a rate of 1.0125 tons per hour. The allowable PM emission rate from the abrasive blasting operation (EU-20a, EU-20b) shall not exceed 3.46 pounds per hour when operating at a rate of 0.775 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

### D.1.3 Volatile Organic Compounds (VOCs) [326 IAC 8-2-9]

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Any change or modification which would increase the actual VOC usage from each of the one (1) zinc plating/chromate treatment dip process (identified as EU-12), the one (1) secondary metal treatment dip process (identified as EU-14), the one (1) dacrotizing metal treatment process (identified as EU-17), the one (1) plating treatment dip tank (identified as EU-19), and the one (1) dip coating operation (identified as EU-22) to fifteen (15) pounds per day or more, shall obtain prior approval from IDEM, OAQ before such change takes place.

## Compliance Determination Requirements

### D.1.4 Particulate Matter (PM)

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Pursuant to CP 059-5331-00024, issued on September 12, 1996, the baghouse for PM control shall be in operation and control emissions from the abrasive blasting operation and all times that the abrasive blasting process is in operation. Also, the electrostatic precipitators for PM control shall be in operation and control emissions from the headforming machines at all times the headforming machines are in operation.

### **Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### **D.1.5 Visible Emissions Notations**

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- (a) Visible emissions notations of the abrasive blasting and the headforming machines stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **D.1.6 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the abrasive blasting process, at least once per shift when the abrasive blasting process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specified otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.1.7 Baghouse Inspections**

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An inspection shall be performed each calendar quarter of all bags controlling the abrasive blasting process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.1.8 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### D.1.9 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below for each of the following facilities: one (1) zinc plating/chromate treatment dip process (identified as EU-12), the one (1) secondary metal treatment dip process (identified as EU-14), the one (1) dacrotizing metal treatment process (identified as EU-17), the one (1) plating treatment dip tank (identified as EU-19), and the one (1) dip coating operation (identified as EU-22). Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limit established in Condition D.1.3.
  - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each day; and
  - (4) The total VOC usage for each day.
- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the abrasive blasting and headforming machines stack exhaust once per shift.
- (b) To document compliance with Condition D.1.6 the Permittee shall maintain the following:
  - (1) Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:

- (A) Inlet and outlet differential static pressure; and
  - (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event.
- (3) Operation and preventive maintenance logs, including work purchase orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	<b>Indiana Automotive Fasteners</b>
<b>Address:</b>	<b>1300 West Anderson Boulevard</b>
<b>City:</b>	<b>Greenfield</b>
<b>Phone #:</b>	<b>317-467-0100</b>
<b>MSOP #:</b>	<b>059-12739-00024</b>

I hereby certify that Indiana Automotive Fasteners is

☒ still in operation.

☐ no longer in operation.

I hereby certify that Indiana Automotive Fasteners is

☒ in compliance with the requirements of MSOP **059-12739-00024**.

☐ not in compliance with the requirements of MSOP **059-12739-00024**.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: \_\_\_\_\_ PHONE NO. (    ) \_\_\_\_\_  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_  
PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND  
REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_    \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_    \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_



(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

PAGE 1 OF 2

**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

### **326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

### **326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Minor Source Operating Permit**

#### **Source Background and Description**

**Source Name:** Indiana Automotive Fasteners, Inc.  
**Source Location:** 1300 West Anderson Boulevard, Greenfield, IN 46140  
**County:** Hancock  
**SIC Code:** 3452  
**Operation Permit No.:** 059-12739-00024  
**Permit Reviewer:** Lisa M. Wasiowich / EVP

The Office of Air Management (OAM) has reviewed an application from Indiana Automotive Fasteners relating to the construction and operation of a facility manufacturing bolts and nuts.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Three (3) electric annealing ovens, identified as EU-1a, EU-1b, and EU-1c, constructed in 1996, and exhausting to stacks V1a and V1b;
- (b) One (1) electric blueing oven, identified as EU-2, constructed in 1996, and exhausting to stacks V1c and V1d;
- (c) Two (2) electric tempering ovens, identified as EU-3a and EU-3b, constructed in 1996, and exhausting to stacks V3a and V3b respectively;
- (d) Two (2) electric quench oil ovens, identified as EU-4a and EU-4b, constructed in 1996, and exhausting to stacks V4a and V4b respectively;
- (e) One (1) oil quench dip bath, identified as EU-4, constructed in 1996, quenching a maximum of 360,000 fasteners per hour, and exhausting to stacks V5 and V5a;
- (f) Twenty-seven (27) head forming machines, identified as EU-6, constructed in 1996, each processing a maximum of 12,000 fasteners per hour, each controlled by a Smog Hog Electrostatic Precipitator, and all exhausting through ten (10) stacks (V6:3-7, 10-13, 15);
- (g) Two (2) SBL shot blasters, identified as EU-8a and EU-8b, constructed in 1996, each using a maximum of 773 pounds per hour of steel shot, controlled by one (1) baghouse, and exhausting to stack V8;
- (h) Two (2) natural gas fired dactroizing ovens, identified as EU-9, and EU-9-1, constructed in 1996, each rated at 1.0 MMBtu/hr, and exhausting to stacks V9 and V9-1 respectively;

- (i) One (1) electric zinc plating oven, identified as EU-10, constructed in 1996, and exhausting to stack V10;
- (j) One (1) zinc plating/chromate treatment dip process, identified as EU-12, constructed in 1996, coating a maximum of 162,000 fasteners per hour, with packed fume scrubbers for control, and exhausting to stack v12;
- (k) One (1) natural gas fired container wash oven, identified as EU-13, constructed in 1996, rated at 1.0 MMBtu/hr, and exhausting to stack V13;
- (l) One (1) secondary metal treatment dip process with an electric oven, identified as EU-14, constructed in 1996, coating a maximum of 152,000 fasteners per hour, and exhausting to stacks V14 and V14-1;
- (m) Two (2) natural gas fired boilers, identified as EU-15, and EU-15-1, constructed in 1996, each rated at 2.1 MMBtu/hr, and exhausting to stacks V15 and V15-1;
- (n) One (1) natural gas fired boiler, identified as EU-16, rated at 1.2 MMBtu/hr, constructed in 1996, and exhausting to stack V16;
- (o) One (1) dactroizing metal treatment process, identified as EU-17, constructed in 1996, coating a maximum of 152,000 fasteners per hour;
- (p) One (1) 7,000 gallon hydrochloric acid (HCL) storage tank, identified as EU-18, constructed in 1996, controlled by a scrubber, and exhausting to stack V18; and
- (q) One (1) Plating treatment dip tank, identified as EU-19, constructed in 1996, coating a maximum of 162,000 fasteners per hour, and venting to stack V19.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval**

The application includes information relating to the construction and operation of the following equipment:

- (a) Two (2) shot blasting units, identified as EU-20a, and EU-20b, each using a maximum of 775 pounds per hour of steel shot, controlled by one (1) baghouse, and exhausting to stack V20;
- (b) One (1) caustic wash and electric dry-off oven, identified as EU-21, and exhausting to stacks V21-A and V21-B;
- (c) One (1) dip coating operation and electric dry-off oven, identified as EU-22, and exhausting to stacks V22-A and V22-B;
- (d) One (1) top coating operation and electric dry-off oven, identified as EU-23, and exhausting to stacks V23-A and V23-B;
- (e) One (1) natural gas CO<sub>2</sub> generator, identified as EU-24, and rated at 0.078 MMBtu/hr, and exhausting to stack V24; and

- (f) One (1) electric tempering oven with a natural gas flame curtain and oil quench tank, identified as EU-25, rated at 0.01 MMBtu/hr, and exhausting to stack V25-B.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 059-5331-00024, issued on September 12, 1996.

All conditions from previous approvals were incorporated into this permit except the following:

- (a) OP 059-5331-00024, issued on September 12, 1996

Condition 9: That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating applied to automotive fasteners by the dacrotizing metal treatment process (ID No. EU#17) shall be limited to 3.5 pounds of VOC per gallon of coating less water delivered to the applicator.

Reason not incorporated: The potential VOC emissions from this unit have been reduced to less than 15 pounds per day. Therefore 326 IAC 8-2-9 no longer applies. The source will be limited to less than 15 pounds per day of actual VOC emissions and record keeping will be required.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
V1a, V1b	annealing ovens - electric	40	1.25	1450	400
V1c, V1d	blueing oven - electric	40	1.25	160	300
V3	tempering ovens	32	1.25	1540	400
V4	oil quench ovens	32	1.6	3200	140
V5	oil quench bath	32	1.25	1540	400
V6:3-7	head forming machines	40	1.0	37800	180
V6:10-13, 15	head forming machines	40	1.33	37800	180
V8	shot blasting	32	1.25	3775	75
V9, V9-1	dactotizing ovens	32	1.25	1440/254	212
V10	zinc plating	46.8	4	10866	100
V12	zinc plating oven - electric	32	1.67	500	392
V13	container wash oven	32	1.0	187	140
V14, V14-1	secondary treatment dip and oven	32	1.75	10	176
V15, V15-1	(2) 2.1 MMBtu/hr boiler	32	1.75	814	400
V16	(1) 1.2 MMBtu/hr boiler	32	0.75	1200	400
V18	HCL tank	32	1.0	ambient	75
V20	shot blasting	32	1.25	3775	ambient
V21-A	Dacro Line - washer electric dry-off oven- entrance	32	1.25	1440	212
V21-B	Dacro Line - washer electric dry-off oven- exit	32	1.25	1440	212
V22-A	Dacro Line - dip tank electric dry-off oven - entrance	32	1.0	1440	212
V22-B	Dacro Line - dip tank electric dry-off oven - exit	32	1.67	1440	212
V23-A	Dacro Line - top coat electric dry-off oven - entrance	27	0.67	500	175
V23-B	Dacro Line - top coat electric dry-off oven - exit	27	0.67	500	175
V24	natural gas CO2 generator	32	0.67	unknown	250
V25-B	electric quench oven	32	1.25	1550	400

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on September 20, 2000.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 7.)

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

### Existing Units

Pollutant	Potential To Emit (tons/year)
PM	60.76
PM-10	58.13
SO <sub>2</sub>	0.02
VOC	4.65
CO	3.09
NO <sub>x</sub>	3.68

HAP's	Potential To Emit (tons/year)
Chromium Compounds	0.10
Hexane	0.07
Hydrochloric Acid	5.12
Methanol	0.03
TOTAL	5.32

### Proposed Units

Pollutant	Potential To Emit (tons/year)
PM	20.31
PM-10	17.47
SO <sub>2</sub>	0.00
VOC	0.28
CO	0.03
NO <sub>x</sub>	0.04

HAP's	Potential To Emit (tons/year)
Chromium Compounds	0.40
TOTAL	0.40

- (a) The total potential to emit (as defined in 326 IAC 2-7-1(29)) of particulate matter is equal to or greater than 25 tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) or particulate matter for the proposed modification is greater than 5 tons per year but less than 25 tons per year. Therefore, pursuant to 326 IAC 2-6.1-6, Section (g)(4), a minor permit revision is required. The issuance of this Minor Source Operating Permit will satisfy this requirement.
- (b) **Fugitive Emissions**  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

No previous emission data has been received from the source.

### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Existing Units							
Natural Gas Combustion	0.07	0.28	0.02	0.20	3.09	3.68	0.07
Abrasive Blasting	0.41	0.35	0.00	0.00	0.00	0.00	0.00
Hydrochloric Acid Storage	0.00	0.00	0.00	0.00	0.00	0.00	5.12
Headforming Machines	4.04	4.04	0.00	2.17	0.00	0.00	0.00
Miscellaneous Activities	0.00	0.00	0.00	2.28	0.00	0.00	0.13
Proposed Units							
Abrasive Blasting	0.41	0.35	0.00	0.00	0.00	0.00	0.00
Miscellaneous Activities	0.00	0.00	0.00	0.28	0.03	0.04	0.40
Total Existing Emissions	4.52	4.67	0.02	4.65	3.09	3.68	5.32
Total Proposed Emissions	0.41	0.35	0.00	0.28	0.03	0.04	0.40
Total Emissions	4.93	5.02	0.02	4.93	3.12	3.72	5.72

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels of 250 tons per year. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### County Attainment Status

The source is located in Hancock County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment



- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Hancock County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Hancock County has been classified as attainment or unclassifiable for all pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	4.95
PM10	5.04
SO <sub>2</sub>	0.00
VOC	4.93
CO	3.10
NO <sub>x</sub>	3.70

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the application submitted by the company.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit CP-059-12739-00024, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

### Federal Rule Applicability

- (a) The two (2) natural gas fired boilers identified as EU-15 and EU-15-1 and rated at 2.1 MMBtu/hr each, and the one (1) natural gas fired boiler identified as EU-16 and rated at 1.2 MMBtu/hr are not subject to the requirements of the New Source Performance Standard, (326 IAC 12 and 40 CFR 60.40c, Subpart Dc) due to the fact that the maximum heat input capacity of all three boilers is less than 10 MMBtu/hour.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR Part 63) applicable to this source.

### State Rule Applicability - Entire Source

#### 326 IAC 2-4.1-1 (New Source Toxics Control)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because the source has PTE of any HAP less than 10 tons per year and PTE of any combination of HAPs less than 25 tons per year. Therefore 326 IAC 2-4.1-1 does not apply.

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Hancock County and the potential to emit all pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating)

The two (2) natural gas-fired boilers (EU-15, EU-15-1) rated at 2.1 MMBtu/hr each, and the one (1) natural gas-fired boiler (EU-16) rated at 1.2 MMBtu/hr, constructed together in 1996, are subject to 326 IAC 6-2-4 for indirect heating facilities constructed after September 21, 1983. Pursuant to this rule, PM emissions from the boilers shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = pounds of particulate matter emitted per million Btu of heat input

Q = total source maximum operating capacity rating in million Btu per hour heat input

$$Pt = \frac{1.09}{(5.4)^{0.26}}$$

$$Pt = 0.7 \text{ pounds per MMBtu}$$

Pursuant to this rule, PM emissions from sources with a total heat capacity less than 10 MMBtu/hr shall not exceed 0.6 pounds of particulate matter emitted per MMBtu. Therefore the PM emissions from the boilers shall be limited to 0.6 pounds per MMBtu

$$0.6 \text{ lbs/MMBtu} * 5.4 \text{ MMBtu/hr} = 3.24 \text{ lb/hr} = 14.19 \text{ tons/year}$$

The actual emissions of 0.07 tons of particulate matter for all natural gas combustion is less than the allowable 14.19 tons per year. Therefore, these facilities are in compliance with this rule.

326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to CP 059-5331-00024, issued on September 12, 1996, the particulate matter (PM) from the abrasive blasting operations shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Shotblasters EU-8a and EU-8b, which vent to a common stack V8:

$$P = (773 \text{ lb/hr per blaster}) * (2 \text{ blasters}) * (1 \text{ ton/ } 2000 \text{ lbs}) = 0.773 \text{ tons/hr}$$

$$E = 4.10 * (0.773^{0.67}) = 3.45 \text{ lb/hr} = 15.11 \text{ tons/year}$$

The baghouse shall be in operation at all times the abrasive blasting equipment is in operation, in order to comply with this limit.

Shotblasters EU-20a and EU-20b, which vent to a common stack V20:

$$P = (775 \text{ lb/hr per blaster}) * (2 \text{ blasters}) * (1 \text{ ton/ } 2000 \text{ lbs}) = 0.775 \text{ tons/hr}$$

$$E = 4.10 * (0.775^{0.67}) = 3.46 \text{ lb/hr} = 15.14 \text{ tons/year}$$

The baghouse shall be in operation at all times the abrasive blasting equipment is in operation, in order to comply with this limit.

- (b) The particulate matter (PM) from the headforming machines shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Headforming machines EU-6, which vent to ten stacks V6:3-7, 10-13, 15:

$$P = (27 \text{ headforming machines}) * (12,000 \text{ fasteners/hour per machine}) * (0.1 \text{ oz} \\ / \text{fastener}) * (1 \text{ lb/ } 16 \text{ oz}) * (1 \text{ ton/ } 2000 \text{ lbs}) = 1.0125 \text{ tons/hr}$$

$$E = 4.10 * (1.0125^{0.67}) = 4.13 \text{ lb/hr} = 18.10 \text{ tons/year}$$

The electrostatic precipitators shall be in operation at all times the headforming machines are in operation, in order to comply with this limit.

**326 IAC 8-2-9 (Miscellaneous Metal Coating)**

The one (1) zinc plating/chromate treatment dip process identified as EU-12, the one (1) secondary metal treatment dip process identified as EU-14, the one (1) dacrotizing metal treatment process identified as EU-17, the one (1) plating treatment dip tank identified as EU-19 and the one dip coating operation identified as EU-22 shall be limited such that the actual VOC emissions from each of these facilities will be less than 15 pounds per day. Therefore, the requirements of 326 IAC 8-2-9 will not apply.

**Conclusion**

The construction and operation of this bolts and nuts manufacturing facility shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 059-12739-00024**.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Addendum to the Technical Support Document for a Minor Source Operating Permit**

Source Name:	Indiana Automotive Fasteners, Inc.
Source Location:	1300 West Anderson Boulevard, Greenfield, Indiana 46140
County:	Hancock
Permit No.:	MSOP-069-12739-00024
SIC Code:	3452
Permit Reviewer:	Lisa M. Wasiowich/EVP

On December 20, 2000, the Office of Air Quality (OAQ) had a notice published in the Daily Reporter, Greenfield, Indiana, stating that Indiana Automotive Fasteners, Inc. had applied for a construction permit to construct and operate additional equipment at a facility manufacturing bolts and nuts for the automotive industry with control. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

The MSOP permit and the affidavit of construction have been revised to reflect the name change of the Office of Air Management (OAM) to the Office of Air Quality (OAQ).

Uncontrolled Potential Emissions (tons/year)							
Emissions Generating Activity							
Pollutant	Natural Gas Combustion	Abrasive Blasting	Hydrochloric Acid Storage	Headforming Machines	Miscellaneous Activities	Proposed Modification	TOTAL
PM	0.07	20.31	0.00	40.38	0.00	20.31	81.07
PM10	0.28	17.47	0.00	40.38	0.00	17.47	75.60
SO2	0.02	0.00	0.00	0.00	0.00	0.00	0.02
NOx	3.68	0.00	0.00	0.00	0.00	0.04	3.72
VOC	0.20	0.00	0.00	2.17	2.28	0.28	4.93
CO	3.09	0.00	0.00	0.00	0.00	0.03	3.12
total HAPs	0.07	0.00	5.12	0.00	0.13	0.40	5.72
worst case single HAP	0.07	0.00	5.12	0.00	0.10	0.40	5.12
Total emissions based on rated capacity at 8,760 hours/year							
Controlled Potential Emissions (tons/year)							
Emissions Generating Activity							
Pollutant	Natural Gas Combustion	Abrasive Blasting	Hydrochloric Acid Storage	Headforming Machines	Miscellaneous Activities	Proposed Modification	TOTAL
PM	0.07	0.41	0.00	4.04	0.00	0.41	4.92
PM10	0.28	0.35	0.00	4.04	0.00	0.35	5.02
SO2	0.02	0.00	0.00	0.00	0.00	0.00	0.02
NOx	3.68	0.00	0.00	0.00	0.00	0.04	3.72
VOC	0.20	0.00	0.00	2.17	2.28	0.28	4.93
CO	3.09	0.00	0.00	0.00	0.00	0.03	3.12
total HAPs	0.07	0.00	5.12	0.00	0.13	0.40	5.72
worst case single HAP	0.07	0.00	5.12	0.00	0.10	0.40	5.12
Total emissions based on rated capacity at 8,760 hours/year, after control							

Appendix A: Emissions Calculations  
VOC and Particulate

Page 4 of 7 TSD App A

Company Name: Indiana Automotive Fasteners  
Address City IN Zip: 1300 West Anderson Boulevard, Greenfield, IN 46140  
CP: 059-12739  
Pit ID: 059-00024  
Reviewer: Lisa M. Wasiowich  
Date: December 1, 2000

Material	Density (Lb/Gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/year)	Actual hours (hours/year)	Percent Recovered	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Lb VOC/gal solids	Transfer Efficiency
Headforming Machines																	
Apollo Hydraulic Fluid AW-68	7.4	80.00%	0.0%	80.0%	0.0%	0.00%	5033.00000	6000.000	90.00%	5.90	5.90	0.49	11.87	2.17	0.00	ERR	100%
Zinc Plater																	
Ekolaskid 455 Brightener	9.3	10.00%	0.0%	10.0%	0.0%	90.00%	440.00000	6000.000	90.00%	0.93	0.93	0.01	0.16	0.03	0.00	1.03	100%
Dip Coating																	
Dacromet DX-380 LV	11.4	68.57%	65.0%	3.6%	88.4%	9.00%	2450.00000	6000.000	90.00%	3.49	0.41	0.02	0.40	0.07	0.00	4.50	100%
Chromate Dips																	
Zinc P-11119	10.1	85.00%	0.0%	85.0%	0.0%	15.00%	2.00000	6000.000	90.00%	8.59	8.59	0.00	0.01	0.00	0.00	57.23	100%
Rolling Oil																	
Daphne Fluid 10-LJ	7.3	90.00%	0.0%	90.0%	0.0%	0.00%	4560.00000	6000.000	90.00%	6.53	6.53	0.50	11.92	2.18	0.00	ERR	100%
Proposed Units																	
Dacromet DX-380 LV	11.4	68.57%	65.0%	3.6%	88.4%	9.00%	9600.00000	6000.000	90.00%	3.49	0.41	0.06	1.56	0.28	0.00	4.50	100%

State Potential Emissions	Add worst case coating to all solvents	1.08	25.91	4.73	0.00
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Note : The rolling oil and the hydraulic fluid for the headforming machines are not used for surface coating.  
METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* [Gal of Material (gal/year) / Actual hours (hours/year)] \* (1-percent recovered)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* [Gal of Material (gal/year) / Actual hours (hours/year) \* (24 hr/day) \* (1-percent recovered)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* [Gal of Material (gal/year) / Actual hours (hours/year)] \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = [(gal/year) / (hours/year)] \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs) \* (1-percent recovered)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used